

**WEST****Freeform Search****Database:**

US Patents Full-Text Database  
US Pre-Grant Publication Full-Text Database  
JPO Abstracts Database  
EPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Term:**

(enniat\$ adj synthas\$) or (enniat\$ adj synthetas\$)

**Display:**  **Documents in Display Format:**  **Starting with Number** **Generate:** ☐ Hit List ☒ Hit Count ☐ Side by Side ☐ Image

Search

Clear

Help

Logout

Interrupt

Main Menu

Show S Numbers

Edit S Numbers

Preferences

Cases

**Search History****DATE:** Tuesday, April 09, 2002 [Printable Copy](#) [Create Case](#)**Set Name Query**  
side by side**Hit Count Set Name**  
result set*DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR*L4 (enniat\$ adj synthas\$) or (enniat\$ adj synthetas\$)12 L4L3 cyclohexadepsipeptid\$8 L3*DB=USPT; PLUR=YES; OP=OR*L2 cyclohexadepsipeptid\$7 L2*DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR*L1 cyclohexadepsipeptid\$8 L1

END OF SEARCH HISTORY

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 8 of 8 returned.**☐ 1. Document ID: US 5945316 A

L3: Entry 1 of 8

File: USPT

Aug 31, 1999

US-PAT-NO: 5945316

DOCUMENT-IDENTIFIER: US 5945316 A

TITLE: Lactic-acid-containing cyclic depsipeptides having 18 ring atoms as endoparasitocidal agents, and process for their preparation

DATE-ISSUED: August 31, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jeschke; Peter	Leverkusen			DEX
Harder; Achim	Koln			DEX
Mencke; Norbert	Leverkusen			DEX
Kleinkauf; Horst	Berlin			DEX
Zocher; Rainer	Berlin			DEX

US-CL-CURRENT: 435/117; 435/120, 435/128, 435/132, 435/135, 435/136, 435/139, 435/147, 435/171, 435/183, 435/68.1, 435/71.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 2. Document ID: US 5911862 A

L3: Entry 2 of 8

File: USPT

Jun 15, 1999

US-PAT-NO: 5911862

DOCUMENT-IDENTIFIER: US 5911862 A

TITLE: Material for establishing solid state contact for ion selective electrodes

DATE-ISSUED: June 15, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Chan; Andy D. C.	Franklin	MA		

US-CL-CURRENT: 204/418; 204/416, 205/787.5, 205/789.5, 427/58

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 3. Document ID: US 5821222 A

L3: Entry 3 of 8

File: USPT

Oct 13, 1998

US-PAT-NO: 5821222

DOCUMENT-IDENTIFIER: US 5821222 A

TITLE: Cyclic depsipeptides having 18 ring atoms for combating endoparasites

DATE-ISSUED: October 13, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bonse; Gerhard	Koln			DEX
Londershausen; Michael	Erkrath			DEX
Bischoff; Erwin	Wuppertal			DEX
Muller; Hartwig	Velbert			DEX
Harder; Achim	Koln			DEX
Mencke; Nobert	Leverkusen			DEX
Kurka; Peter	Hilden			DEX
Jeschke; Peter	Leverkusen			DEX
Scherkenbeck; Jurg	Wermelskirchen			DEX

US-CL-CURRENT: 514/11; 514/2, 514/9, 530/317, 530/343

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC
Drawn Desc	Image										

☐ 4. Document ID: US 5738774 A

L3: Entry 4 of 8

File: USPT

Apr 14, 1998

US-PAT-NO: 5738774

DOCUMENT-IDENTIFIER: US 5738774 A

TITLE: Eva containing ion selective membranes and methods of making same

DATE-ISSUED: April 14, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Harrison; Daniel J.	Edmonton			CAX
Neufeld; Aaron	Upper Peckenham			AUX

US-CL-CURRENT: 204/418; 422/82.03

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC
Drawn Desc	Image										

☐ 5. Document ID: US 5656464 A

L3: Entry 5 of 8

File: USPT

Aug 12, 1997

US-PAT-NO: 5656464

DOCUMENT-IDENTIFIER: US 5656464 A

TITLE: Lactic-acid-containing cyclic depsipeptides having 18 ring atoms as endoparasitocidal agents, and process for their preparation

DATE-ISSUED: August 12, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jeschke; Peter	Leverkusen			DEX
Harder; Achim	Cologne			DEX
Mencke; Norbert	Leverkusen			DEX
Kleinkauf; Horst	Berlin			DEX
Zocher; Rainer	Berlin			DEX

US-CL-CURRENT: 435/117; 435/120, 435/128, 435/132, 435/135, 435/136, 435/139, 435/147,  
435/171, 435/68.1, 435/71.1, 530/317

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

☐ 6. Document ID: US 5624897 A

L3: Entry 6 of 8

File: USPT

Apr 29, 1997

US-PAT-NO: 5624897

DOCUMENT-IDENTIFIER: US 5624897 A

TITLE: Cyclic depsipeptides having 18 ring atoms, and their use for combating endoparasites

DATE-ISSUED: April 29, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jeschke; Peter	Leverkusen			DEX
Scherkenbeck; Jurgen	Wermelskirchen			DEX
Bonse; Gerhard	Koln			DEX
Bischoff; Erwin	Wuppertal			DEX
Mencke; Norbert	Leverkusen			DEX
Harder; Achim	Koln			DEX
Londershausen; Michael	Erkrath			DEX
Muller; Hartwig	Velbert			DEX

US-CL-CURRENT: 514/11; 530/323

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

☐ 7. Document ID: US 4214968 A

L3: Entry 7 of 8

File: USPT

Jul 29, 1980

US-PAT-NO: 4214968

DOCUMENT-IDENTIFIER: US 4214968 A

TITLE: Ion-selective electrode

DATE-ISSUED: July 29, 1980

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Battaglia; Charles J.	Rochester	NY		
Chang; Jack C.	Rochester	NY		
Daniel; Daniel S.	Rochester	NY		

US-CL-CURRENT: 204/418; 204/435

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc	Image								

KMC

☐ 8. Document ID: EP 1144658 A2, WO 200042203 A2, AU 200026120 A

L3: Entry 8 of 8

File: DWPI

Oct 17, 2001

DERWENT-ACC-NO: 2000-482833

DERWENT-WEEK: 200169

COPYRIGHT 2002 DERWENT INFORMATION LTD

TITLE: Producing a heterologous polypeptide for production of antibiotics comprises cultivating a mutant of a parent filamentous fungal cell comprising a nucleic acid sequence encoding cyclohexadepsipeptide

INVENTOR: BERKA, R M; REY, M W ; YODER, W T

PRIORITY-DATA: 1999US-0229862 (January 13, 1999)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 1144658 A2	October 17, 2001	E	000	C12N015/80
WO 200042203 A2	July 20, 2000	E	076	C12N015/80
AU 200026120 A	August 1, 2000		000	C12N015/80

INT-CL (IPC): C12 N 1/14; C12 N 9/88; C12 N 15/60; C12 N 15/80; C12 N 1/14; C12 R 1/77; C12 R 1/77; C12 N 1/14

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc	Image								

KMC

Generate Collection

Print

Terms

Documents

cyclohexadepsipeptid\$

8

Display Format:

-

Change Format

[Previous Page](#)

[Next Page](#)

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 10 of 12 returned.**☐ 1. Document ID: US 6358712 B1

L4: Entry 1 of 12

File: USPT

Mar 19, 2002

US-PAT-NO: 6358712

DOCUMENT-IDENTIFIER: US 6358712 B1

TITLE: Ordered gene assembly

DATE-ISSUED: March 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jarrell; Kevin A.	Lincoln	MA		
Coljee; Vincent W.	Cambridge	MA		
Donahue; William	Quincy	MA		
Mikheeva; Svetlana	Allston	MA		

US-CL-CURRENT: [435/91.1](#); [435/6](#), [435/91.2](#), [435/91.3](#), [435/91.52](#), [536/23.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 2. Document ID: US 6117670 A

L4: Entry 2 of 12

File: USPT

Sep 12, 2000

US-PAT-NO: 6117670

DOCUMENT-IDENTIFIER: US 6117670 A

TITLE: Pyrrolnitrin biosynthesis genes and uses thereof

DATE-ISSUED: September 12, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James Madison	Apex	NC		
Hill; Dwight Steven	Cary	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip Eugene	Cary	NC		
van Pee; Karl-Heinz	Bannewitz			DEX
Kirner; Sabine	Puchheim			DEX
Young; Thomas R.	Vero Beach	FL		

US-CL-CURRENT: [435/252.33](#); [435/189](#), [435/232](#), [435/252.3](#), [435/320.1](#), [536/23.1](#), [536/23.2](#), [536/23.7](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 3. Document ID: US 6033879 A

L4: Entry 3 of 12

File: USPT

Mar 7, 2000

US-PAT-NO: 6033879

DOCUMENT-IDENTIFIER: US 6033879 A

TITLE: Process for the preparation of substituted aryl lactic acid containing cyclodepsipeptides with 24 ring atoms

DATE-ISSUED: March 7, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jeschke; Peter	Leverkusen			DEX
Bonse; Gerhard	Koln			DEX
Thielking; Gerhard	Burscheid			DEX
Etzels; Winfried	Leichlingen			DEX
Harder; Achim	Koln			DEX
Mencke; Norbert	Leverkusen			DEX
Kleinkauf; Horst	Berlin			DEX
Zocher; Rainer	Berlin			DEX
Iinuma; Katsuharu	Yokohama			JPX
Miyamoto; Kouichi	Berlin			DEX

US-CL-CURRENT: 435/71.1; 435/171, 435/254.1, 435/911, 514/11, 530/317, 530/321

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 4. Document ID: US 5945316 A

L4: Entry 4 of 12

File: USPT

Aug 31, 1999

US-PAT-NO: 5945316

DOCUMENT-IDENTIFIER: US 5945316 A

TITLE: Lactic-acid-containing cyclic depsipeptides having 18 ring atoms as endoparasitocidal agents, and process for their preparation

DATE-ISSUED: August 31, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jeschke; Peter	Leverkusen			DEX
Harder; Achim	Koln			DEX
Mencke; Norbert	Leverkusen			DEX
Kleinkauf; Horst	Berlin			DEX
Zocher; Rainer	Berlin			DEX

US-CL-CURRENT: 435/117; 435/120, 435/128, 435/132, 435/135, 435/136, 435/139, 435/147,



435/171, 435/183, 435/68.1, 435/71.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWC

☐ 5. Document ID: US 5817502 A

L4: Entry 5 of 12

File: USPT

Oct 6, 1998

US-PAT-NO: 5817502

DOCUMENT-IDENTIFIER: US 5817502 A

TITLE: Genes for the synthesis of pyrrolnitrin

DATE-ISSUED: October 6, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James M.	Apex	NC		
Hill; Dwight Steven	Cary	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip E.	Cary	NC		
van Pee; Karl-Heinz	Bannewitz			DEX
Kirner; Sabine	Puchheim			DEX

US-CL-CURRENT: 435/252.34; 435/117, 435/252.3, 435/252.33, 435/320.1, 435/69.1,  
435/71.1, 536/23.2, 536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWC

☐ 6. Document ID: US 5723759 A

L4: Entry 6 of 12

File: USPT

Mar 3, 1998

US-PAT-NO: 5723759

DOCUMENT-IDENTIFIER: US 5723759 A

TITLE: Pyrrolnitrin biosynthesis genes

DATE-ISSUED: March 3, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James M.	Basel			CHX
Hill; Dwight Steven	Cary	NC		
Ryals; John Andrew	Durham	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip E.	Cary	NC		

US-CL-CURRENT: 800/301; 435/117, 435/252.3, 435/320.1, 435/69.1, 435/70.1, 536/23.2,  
536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 7. Document ID: US 5698425 A

L4: Entry 7 of 12

File: USPT

Dec 16, 1997

US-PAT-NO: 5698425

DOCUMENT-IDENTIFIER: US 5698425 A

TITLE: Method of protecting plants by transformation with genes for the synthesis of antipathogenic substances

DATE-ISSUED: December 16, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James M.	Basel			CHX
Schupp; Thomas	Mohlin			CHX
Beck; James Joseph	Cary	NC		
Hill; Dwight Steven	Cary	NC		
Ryals; John Andrew	Durham	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip E.	Cary	NC		
Uknes; Scott Joseph	Apex	NC		

US-CL-CURRENT: 800/279; 435/117, 435/418, 435/419, 435/69.1, 435/70.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 8. Document ID: US 5679560 A

L4: Entry 8 of 12

File: USPT

Oct 21, 1997

US-PAT-NO: 5679560

DOCUMENT-IDENTIFIER: US 5679560 A

TITLE: Genes for the synthesis of antipathogenic substances

DATE-ISSUED: October 21, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James M.	Apex	NC		
Hill; Dwight Steven	Cary	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip E.	Cary	NC		

US-CL-CURRENT: 435/183; 435/253.3, 435/41

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMC

☐ 9. Document ID: US 5662898 A

L4: Entry 9 of 12

File: USPT

Sep 2, 1997

US-PAT-NO: 5662898

DOCUMENT-IDENTIFIER: US 5662898 A

TITLE: Genes for the synthesis of antipathogenic substances

DATE-ISSUED: September 2, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James M.	Basel			CHX
Schupp; Thomas	Mohlin			CHX
Beck; James Joseph	Cary	NC		
Hill; Dwight Steven	Cary	NC		
Ryals; John Andrew	Durham	NC		
Gaffney; Thomas Deane	Chapel Hill	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip E.	Cary	NC		
Uknes; Scott Joseph	Apex	NC		

US-CL-CURRENT: 424/93.2; 435/252.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWC

☐ 10. Document ID: US 5656464 A

L4: Entry 10 of 12

File: USPT

Aug 12, 1997

US-PAT-NO: 5656464

DOCUMENT-IDENTIFIER: US 5656464 A

TITLE: Lactic-acid-containing cyclic depsipeptides having 18 ring atoms as endoparasitocidal agents, and process for their preparation

DATE-ISSUED: August 12, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jeschke; Peter	Leverkusen			DEX
Harder; Achim	Cologne			DEX
Mencke; Norbert	Leverkusen			DEX
Kleinkauf; Horst	Berlin			DEX
Zocher; Rainer	Berlin			DEX

US-CL-CURRENT: 435/117; 435/120, 435/128, 435/132, 435/135, 435/136, 435/139, 435/147, 435/171, 435/68.1, 435/71.1, 530/317

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWC

Generate Collection

Print

Terms	Documents
(enniat\$ adj synthas\$) or (enniat\$ adj synthetas\$)	12

Display Format: -

Change Format

[Previous Page](#)

[Next Page](#)

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 11 through 12 of 12 returned.**☐ **11. Document ID: US 5643774 A**

L4: Entry 11 of 12

File: USPT

Jul 1, 1997

US-PAT-NO: 5643774

DOCUMENT-IDENTIFIER: US 5643774 A

TITLE: Genes for the synthesis of antipathogenic substance

DATE-ISSUED: July 1, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James M.	Basel			CHX
Schupp; Thomas	Mohlin			CHX
Beck; James Joseph	Cary	NC		
Hill; Dwight Steven	Cary	NC		
Ryals; John Andrew	Durham	NC		
Gaffney; Thomas Deane	Chapel Hill	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip E.	Cary	NC		
Uknes; Scott Joseph	Apex	NC		

US-CL-CURRENT: 435/183; 435/69.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Drawn Desc	Image									

☐ **12. Document ID: US 5639949 A**

L4: Entry 12 of 12

File: USPT

Jun 17, 1997

US-PAT-NO: 5639949

DOCUMENT-IDENTIFIER: US 5639949 A

TITLE: Genes for the synthesis of antipathogenic substances

DATE-ISSUED: June 17, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ligon; James M.	Basel			CHX
Hill; Dwight Steven	Cary	NC		
Ryals; John Andrew	Durham	NC		
Lam; Stephen Ting	Raleigh	NC		
Hammer; Philip E.	Cary	NC		

US-CL-CURRENT: 800/301; 435/117, 435/252.33, 435/252.34, 435/320.1, 435/69.1, 435/71.1,  
536/23.2, 536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw	Desc	Image								

---

[Generate Collection](#)[Print](#)

---

Terms	Documents
(enniat\$ adj synthas\$) or (enniat\$ adj synthetas\$)	12

---

**Display Format:**

-

[Change Format](#)[Previous Page](#)[Next Page](#)